



#9

sequence list.ST25
SEQUENCE LISTING

<110> Leung, Shawn Shui-on

<120> REDUCING IMMUNOGENICITIES OF IMMUNOGLOBULINS BY FRAMEWORK-PATCHING

<130> 655

<140> US 09/892,613

<141> 2001-06-27

<160> 32

<170> PatentIn version 3.1

<210> 1

<211> 369

<212> DNA

<213> Full length cDNA sequence

<400> 1
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tcctgtgcag cctctggatt ctccttcagt atctatgaca tgtcttgggt tcgccaggca 120
ccgggaaagg ggctggagtg ggtcgcatac attagtagtg gtggtggtac cacctactat 180
ccagacactg tgaagggccg attcaccatc tccagagaca atgccaagaa ctccctgtac 240
ctgcaaatac acagtctgag ggtggaggac acagccttat attactgtgc aagacatagt 300
ggctacggta gtagctacgg ggttttgttt gcttactggg gccaaaggac tctggtcact 360
gtctcttca 369

<210> 2

<211> 123

<212> PRT

<213> Full length amino acid sequence

sequence list.ST25

<400> 2

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ile Tyr
20 25 30

Asp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Tyr Ile Ser Ser Gly Gly Gly Thr Thr Tyr Tyr Pro Asp Thr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Arg His Ser Gly Tyr Gly Ser Ser Tyr Gly Val Leu Phe Ala Tyr
100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 3

<211> 111

<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 3

cctggagggt ccctgaggct ctctgtgca gcctctggat tctccttcag tatctatgac 60

atgtcttggg ttgccaggc accgggaaag gggctggagt gggtcgcata c 111

<210> 4

<211> 57

<212> DNA

<213> 5' Primer for N-template

sequence list.ST25

<400> 4
gaagtgcagc tgctggagtc tgggggaggc ttagtgcagc ctggagggtc cctgagg 57

<210> 5

<211> 48

<212> DNA

<213> 3' Primer for N-template

<400> 5
gtagggtgga ccaccaccac tactaatgta tgcgaccac tccagccc 48

<210> 6

<211> 132

<212> DNA

<213> C-terminal sense strand template DNA sequence

<400> 6
ttcaccatct ccagagacaa tgccaagaac tccctgtacc tgcaaatgaa cagtctgagg 60
gtggaggaca cagccttata ttactgtgca agacatagtg gctacggtag tagctacggg 120
gttttgtttg ct 132

<210> 7

<211> 60

<212> DNA

<213> 5' Primer for C-template

<400> 7
ggtggtacca cctactatcc agacactgtg aagggccgat tcaccatctc cagagacaat 60

<210> 8

<211> 57

<212> DNA

<213> 3' Primer for C-template

<400> 8
tgaagagaca gtgaccagag tcccttggcc ccagtaagca aacaaaaccc cgtagct 57

sequence list.ST25

<210> 9

<211> 321

<212> DNA

<213> Full length cDNA sequence

<400> 9

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ggtaaggctc cgaaactcct gatctactac actagtatat tacactcagg agtcccatca      180
aggttcagtg gcagtgggtc tggaacagaa ttactctca ccattagctc cctgcagcca      240
gaagattttg ccacttactt ttgccaacag ggtaatacgc ttccgtggac gttcgggtgga      300
ggcaccaagg tggaaatcaa a                                              321

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<210> 10

<211> 107

<212> PRT

<213> Full length amino acid sequence

<400> 10

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1       5       10
Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
20      25      30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35      40      45
Tyr Tyr Thr Ser Ile Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50      55      60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65      70      75      80
Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Trp
85      90      95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100     105

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sequence list.ST25

<210> 11

<211> 108

<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 11

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aattatttaa actggtatca gcagaaacca ggtaaggctc cgaaactc 108

<210> 12

<211> 51

<212> DNA

<213> 5' Primer for N template

<400> 12

gatatccaga tgaccagtc tccatcctcc ctgtctgcct ctgtgggaga c 51

<210> 13

<211> 40

<212> DNA

<213> 3' Primer for N-template

<400> 13

atatactagt gtagtagatc aggagtttcg gaggccttacc 40

<210> 14

<211> 120

<212> DNA

<213> C-terminal sense strand template DNA sequence

<400> 14

ccatcaaggt tcagtggcag tgggtctgga acagaattta ctctcaccat tagctccctg 60

cagccagaag attttgccac ttacttttgc caacagggta atacgcttcc gtggacgttc 120

<210> 15

sequence list.ST25

<211> 49

<212> DNA

<213> 5' Primer for C-template

<400> 15

ctacactagt atattacact caggagtccc atcaagggttc agtggcagt 49

<210> 16

<211> 48

<212> DNA

<213> 3' Primer for C-template

<400> 16

tttgatttcc accttggtgc ctccaccgaa cgtccacgga agcgtatt 48

<210> 17

<211> 371

<212> DNA

<213> Full length cDNA sequence

<400> 17

cagggtgcaac tgggtggcttc cggggctgag gtaaataagc ctggggcctc agtgaaggctc 60

tcctgcaagg cttctggcta cacatttacc agttacaata tgcactgggt acggcagcct 120

cctggaaggg gcctggaatg gattggagct atttatccag gaaatggtga tactagttag 180

aatcagaaat tcaagggcaa ggccacattg actgcagaca aatcctccag cacagcctac 240

atgcagctca gcagtctgac atctgaggac tctgcggtct attactgtgc aagatcgac 300

tacggtagta actacgtaga ctactttgac tactggggcc aaggcaccac tgttacagtc 360

tcctctgac a 371

<210> 18

<211> 123

<212> PRT

<213> Full-length amino acid sequence

sequence list.ST25

<400> 18

Gln Val Gln Leu Val Ala Ser Gly Ala Glu Val Asn Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Asn Met His Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile
 35 40 45
 Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
 50 55 60
 Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
 65 70 75 80
 Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Ser His Tyr Gly Ser Asn Tyr Val Asp Tyr Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Thr Val Thr Val Ser Ser Asp
 115 120

<210> 19

<211> 114

<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 19

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<210> 20

<211> 57

<212> DNA

<213> 5' Primer for N-template

<400> 20

caggtgcaac tggtggcttc cggggctgag gtaaataagc ctggggcctc agtgaag 57

sequence list.ST25

<210> 21
 <211> 55
 <212> DNA
 <213> 3' Primer for N-template

<400> 21
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<210> 22
 <211> 126
 <212> DNA
 <213> C-terminal sense strand template DNA sequence

<400> 22
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 gactctgcgg tctattactg tgcaagatcg cactacggta gtaactacgt agactacttt 120
 gactac 126

<210> 23
 <211> 61
 <212> DNA
 <213> 5' Primer for C-template

<400> 23
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<210> 24
 <211> 59
 <212> DNA
 <213> 3' Primer for C-template

<400> 24
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sequence list.ST25

<210> 25

<211> 321

<212> DNA

<213> Full-length cDNA sequence

<400> 25

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gatattcaac tcacacagtc tccatcaagt ctttctgcat ctgtggggga cagagtcaca      60
attacttgca gggccagctc aagtttaagt ttcatgcact ggtaccagca gaagccagga      120
tcctcccca aaccttgat ttatgccaca tccaacctgg cttccggagt ccctagtcgc      180
ttcagtggca gtgggtctgg gaccgagttc actctcacia tcagcagttt gcagcctgaa      240
gatttcgcca cttatttctg ccatcagtgg agtagtaacc cgctcacgtt cggtgctggg      300
accaagctga ccgttctacg g                                     321
  
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<210> 26

<211> 107

<212> PRT

<213> Full-length amino acid sequence

<400> 26

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Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1          5          10          15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Leu Ser Phe Met
          20          25          30
His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
          35          40          45
Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
          50          55          60
Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65          70          75          80
Asp Phe Ala Thr Tyr Phe Cys His Gln Trp Ser Ser Asn Pro Leu Thr
          85          90          95
Phe Gly Ala Gly Thr Lys Leu Thr Val Leu Arg
          100          105
  
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sequence list.ST25

<210> 27
 <211> 129
 <212> DNA
 <213> N-terminal sense strand template DNA sequence

<400> 27
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 gccacatcc 129

<210> 28
 <211> 45
 <212> DNA
 <213> 5' Primer for N-template

<400> 28
 gatattcaac tcacacagtc tccatcaagt ctttctgcat ctgtg 45

<210> 29
 <211> 40
 <212> DNA
 <213> 3' Primer for N-template

<400> 29
 ggactccgga agccaggttg gatgtggcat aaatccaggg 40

<210> 30
 <211> 120
 <212> DNA
 <213> C-terminal sense strand template DNA sequence

<400> 30
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 gatttcgcca cttatttctg ccatcagtg agtagtaacc cgctcacgtt cggtgctggg 120

sequence list.ST25

<210> 31

<211> 43

<212> DNA

<213> 5' Primer for C-template

<400> 31

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43

<210> 32

<211> 42

<212> DNA

<213> 3' Primer for C-template

<400> 32

ccgtagaacg gtcagcttgg tcccagcacc gaacgtgagc gg

42